



21st Biennial Conference on the Biology of Marine Mammals

13-18 DECEMBER 2015
HILTON SAN FRANCISCO UNION SQUARE
SAN FRANCISCO, CA USA

[Presentation Index](#) [Author Index](#) marinemammalscience.org

Should I Stay or Should I Go: Movement and Residency Patterns of Satellite Tagged Pilot Whales Offshore of Cape Hatteras, NC

[Heather Foley](#) [Danielle Waples](#) [Zach Swaim](#) [Robin Baird](#) [Daniel Webster](#) [Joel Bell](#) [Andrew Read](#)

We deployed 20 Low-Impact Minimally-Percutaneous External-electronics Transmitter (LIMPET) satellite-linked transmitters and dive recorders on short-finned pilot whales (*Globicephala macrorhynchus*) off Cape Hatteras, NC during the summer of 2014. Our objective was to obtain information on medium-term movement and diving patterns of individual animals to complement existing information on long-term residency patterns derived from photo-identification and short-term diving behavior from Digital Acoustic Tags. We deployed 14 location-only (SPOT5) tags and six MK 10-A tags, which provided information on depth of dive, as well as location data. We received transmissions and data from these tags for up to 194 days (median=43 days). Tagged individuals ranged from Onslow Bay, NC north to Georges Bank, MA, and east to the New England seamounts. Most tagged individuals showed a very strong affinity for the continental shelf break, but there was wide variation in movement patterns and habitat use at the individual level. Maximum distances from the tagging location ranged from 7 - 1192 km (median=252 km), while cumulative distances traveled spanned 55 - 7564 km (median=2322 km). Despite these long-distance movements, however, we observed a high degree of site fidelity of short-finned pilot whales off Cape Hatteras, with 25 inter-annual and inter-season photographic matches (11%) in a preliminary catalog of 229 individuals. Some individuals have been matched over periods of up to six years. We matched three of the satellite-tagged animals (15%) to our existing photo-identification catalog. One hypothesis for this apparent conundrum is that the shelf break offshore of Cape Hatteras, NC is an important area for this species, to which individuals return frequently. We are conducting additional satellite tagging efforts off Cape Hatteras, NC and continuing to examine photo-identification records and social structure of short-finned pilot whales to further refine patterns of their long-term spatial and habitat use of the species in the Northwest Atlantic.

[Online Help & Support](#)

Copyright 2015 | Duplication of this product and its content in print or digital form for the purpose of sharing with others is prohibited without permission from [Society for Marine Mammalogy](#).

This [Digital Publishing Platform](#) was produced by [Omnipress](#).

[Privacy](#) : [Online Help & Support](#)